GORDIYENKO, P.A., starshiy nauchnyy sotrudnik; FEDOTOV, V.I., inzh.-laborant; SHIL'NIKOV, V.I., mladshiy nauchnyy sotrudnik; BUYNITSKIY, V.Kh., doktor geograf.nauk, red.; PAKHAREVA, M.M., red.; DROZHZHINA, L.P., tekhn.red.

[Materials of the Soviet Antarctic Expedition, 1955-] Materialy Sovetskoi antarkticheskoi ekspeditsii, 1955- . Leningrad, Izd-vo "Morskoi transport." Vol.11. [Ice cover of the shore waters of eastern Antarctica] Ledianoi pokrov pribrezhnykh vod Vostochnoi Antarktidy. 1960. 116 p.

(MIRA 14:2)

1. Sovetskaya antarkticheskaya ekspeditsiya, 1955- .
(Antarctic regions--Russian exploration)

SIMONOV, I.M.; mladshiy nauchnyy sotrudnik; FEDOTOV, V.I., mladshiy nauchnyy sotrudnik

Lakes of the Schirmacher Oasis. Inform. biul. Sov. antark. eksp. no.47:19-23 '64. (MIRA 18:4)

1. Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut.

FEDOTOV, V.I.

A boring instrument used by foreign ice researchers. Trudy AANII 267:153-158 '64 (MIRA 18:1)

FEDOTOV, V.K.

S/194/61/000/012/010/097
D209/D303

AUTHORS: Sevast'yanov, V. V., Likhterov, I. M., Petukhov, V.N., Sherman, B. P., Fedotov, V. K. and Golovach, V. K.

TITLE: Introducing level-meters to nonferrous metallurgy plants

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 12, 1961, 31, abstract 12A229 (Radioakt. izotopy i yadern. izlucheniya v nar. kh-ve SSSR. V. 3, M., Gostoptekhizdat, 1961, 162-164)

TEXT: Described is a high sensitivity positional level-meter (L) type УРП-1013 (URP-1013) for signalling attainment of the degree of separation between two substances of different densities without direct contact with the system under investigation. The separation is determined by recording the change of intensity of γ-radiation passing through the mixture. The instrument consists of a power unit, four radiation sources and four radiation receivers. Various installation methods of L are described, depending on the proper-

Card 1/2

Introducing level-meters ... S/194/61/000/012/010/097
D209/D303

ties of the mixture. Installation diagrams of L are given. The application of L to the bins of a crushing-agglomerating plant resulted in its automation. There are 2 figures. [Abstractor's note: Complete translation.]

Card 2/2

FEDOTOV, V. L.

*RT-868 (Use of a narrow-band amplifier in oscillographic investigation of the electron velocity distribution functions in an electrical discharge) Primenenie uzkopolosnogo usilitelia dlia ostsillograficheskogo issledovaniia funktsii raspredeleniia elektronov po skorostiam v elektricheskom razriade.
DOKLADY AKADEMII NAUK SSSR, 92(2): 269-271, 1953.

FEDOTOV, V. M.

"Treatment of Eczemas by Bucky's Boundary Rays," Sov. Med., No. 1, 1948.

FEDOTOV, V. M.

"Affection of the Integuments of the Extremities of Wounds of the Spinal Cord," Sov. Med., No. 2, 1948.

Moscow Neurological Dept., Cent. Inst. of Health Resorts.

FEDOTOV, V. M.

"Treatment of Chronic Eczema with Ozokerite," Sov. Med., No. 8, 1948.

FEDOTOV, V. M.

USSR/Medicine - Skin, Diseases — Feb 1948
Medicine - Influenza

"Clinical Diagnosis of Grippal Exanthemata," V. M. Fedotov, Chair Skin-Venereal Diseases, Chair Polyclinic Internal Diseases, First MOLMI, 2 pp

"Klin Medits" Vol XXVI, No 2

PA/7T71

Data to clarify certain doubtful points in clinical diagnosis of grippal exanthemata. In particular, collected data presents some aspects of dermatosis, the result of grippal exanthemata. Divides such skin afflictions into five groups. Director of Chair of Skin-Venereal Diseases: Prof O. N. Podvysotskaya, Corresponding Member, Academy of Sciences, USSR.

47T71

USSR/Medicine - Skin, Diseases (Contd) — Feb 1948

Director of Chair of Polyclinic of Internal Diseases: Prof D. M. Rossiyskiy, Honorary Promoter of Science.

47T71

APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00041273(

FEDOTOV, V.M.

Treatment of skin diseases by general and local applications with a Naftalan oil emulsion exposed to sound waves. Vop.kur.,fizioter. i lech.fiz.kul't. no.4:63-56 O-D '55. (MIRA 12:12)

1. Konsul'tant-dermatolog TSentral'nogo instituta kurortologii (dir. - kand.med.nauk G.N. Psopelova)

(SKIN, diseases,
ther., naphthalan emulsion exposed to sound waves
(EMULSIONS,
naphthalan, treated with sound waves, ther. of skin dis.)
(PETROLEUM PRODUCTS,
naphthalan emulsion treated with sound waves, ther. of skin dis.)

EXCERPTA MEDICA Sec.13 Vol.12/3 Dermato-Venereology Mar58

FEDOTOV, V.M.

572. TREATMENT OF DANDRUFF AND LOSS OF HAIR BY USING A HYDROGEN SULPHIDE CAP - Lechenie vypadeniya volos i perkhoti primeneniem serovodorodnoi shapochki - Fedotov-V.M. and Nevraeva A.S. VOP. KURORTOLOGII 1956, 3 (75-76)

The method of treatment is as follows: the hair is wetted with a solution of hydrogen sulphide in water (concentration 150 mg./l., temperature 37°) and a cap made of 15 layers of gauze and soaked in the same solution is placed on the head. It is then covered with oil-cloth and a beret is placed over this for 10-15 minutes. 18-20 applications constitute a course of treatment. The authors emphasize the absence of any side-effects. The method described is suitable for ambulatory treatment; it also has prophylactic properties, preventing further development of seborrhoea and further loss of hair.

Cent. Inst. Kurortologii.

BARTULIS, Anton Petrovich, svinar', Geroy Sotsialisticheskogo Truda; FEDOTOV, V.M., red.; DEYEVA, V.M., tekhn.red.

[My method of fattening swine] Moi metod otkorma svinei. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1960. 38 p. (MIRA 14:1)

1. Sovkhoz "Kotenieki" Latviyskoy SSR (for Bartulis).
(Swine--Feeding and feeds)

ZABOTINA, Zinaida Ivanovna; FEDOTOV, Vyacheslav Mikhaylovich; VINOKUR, I.Ye., red.

[Organization of the loose housing of cows] Opyt organizatsii besprivlaznogo soderzhaniia korov. Moskva, Proftekhizdat, 1963. 111 p. (MIRA 17:12)

L 30357-66

ACC NR: AT6008317 SOURCE CODE: UR/0000/65/000/000/0086/0094

AUTHOR: Berkman, R. Ya. (L'vov); Fedotov, V.M. (L'vov)

17
Bx1

ORG: none

TITLE: The analysis of the influence of the external magnetic field on the zero drift of magnetic modulators

SOURCE: AN UkrSSR. Elementy sistem otbora i peredachi informatsii (Elements of systems for selecting and transferring information). Kiev, Naukova dumka, 1965, 86-94

TOPIC TAGS: magnetic modulation, magnetic field interference, external magnetic field

ABSTRACT: The zero drift of magnetic modulators (MM) caused by external magnetic fields is one of the basic causes of errors in highly sensitive devices of this kind. The authors studied the most common MM with a second harmonic output and found that the asymmetry of semielements can be traced to the 1) longitudinal nonuniformity of the testing MM coil; 2) nonuniformity of the excitation coil; 3) nonuniformity in the magnetic properties of core materials; 4) nonuniformities in core cross sections; and 5) nonuniform distribution of parasitic capacitances of the coils and the specific resistivity of the core material. The present article, representing the first of a series of papers, offers a thorough analysis of the influence of the nonuniformities in the test coil on the zero drift in magnetic modulators. Newly derived relationships were first translated into appropriate graphs and then compared with the experimentally measured values of the total asymmetricity coefficient of four magnetic modulators

Card 1/2

L 30357-66

ACC NR: AT6008317

caused by all destabilizing factors. The comparison of the theoretical and experimental data indicates that the parasitic output MM signal caused by the external field because of the asymmetry of the test coil depends on the relationship between the geometric dimensions and on the mode of MM excitation. It increases with the increase in excitation, decrease in cross section, and increase in diameter of the MM core. Orig. art. has: 20 formulas, 4 figures, and 1 table.

SUB CODE: 09,20 SUBM DATE: 06Nov65 / ORIG REF: 002

Card 2/2

L 3936-66 EWT(1) IJP(c) GD-2

ACC NR: AP6002885 SOURCE CODE: UR/0266/65/000/024/0041/0042

INVENTOR: Fedotov, V. M.; Berkman, R. Ya.

ORG: none

TITLE: Device for measuring magnetic fields. Class 21, No. 176978

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 24, 1965, 41-42

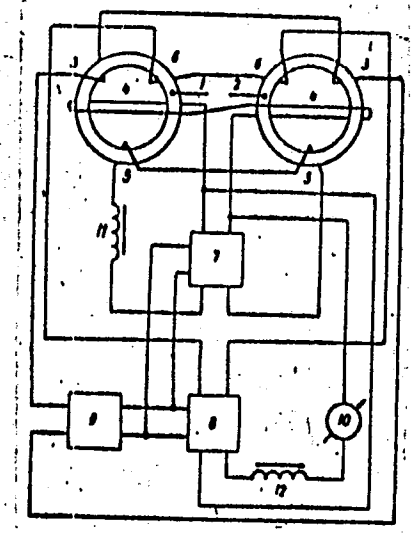
TOPIC TAGS: magnetic field, magnetic field measurement, ~~measurement, measuring instrument~~, magnetic amplifier, phase detector, physics laboratory instrument

TRANSLATION: A device for measuring magnetic fields, consisting of an annular iron probe and a magnetic amplifier, is characterized by the fact that the receiving windings of the iron probe are applied in the form of narrow loops over each of the annular cores and connected with the input winding of the magnetic amplifier by a phase detector. The input windings of the magnetic amplifier are drawn over the entire length of the cores and connected with the output winding of the magnetic amplifier by a supplementary phase detector. These characterisitcs were incorporated in the design in order to reduce the weight and size of the device as well as the power consumption. [EB]

Card 1/2 UDC: 621.317.42

L 39636-66

ACC NR: AP6002885



1 and 2 - annular cores; 3 - excitation winding; 4 - winding of the iron probe; 5 - input winding of the magnetic amplifier; 6 - output winding of the magnetic amplifier; 7 and 8 - phase detectors; 9 - generator; 10 - recorder; 11 and 12 - filters.

SUB CODE: 20/ SUBM DATE: 21Nov64

Card 2/2

OGNEV, S.S., inzh.; FEDOTOV, V.N., inzh.

The electrical industry prepares for the 22d Congress of the CPSU. Vest. elektroprom. 32 no.10:1-6 O '61. (MIRA 14:9)
(Electric industries)

S/181/62/004/001/016/052
B125/B104

AUTHORS: Garif'yanov, N. S., Fedotov, V. N., and Timerov, R. Kh.

TITLE: Measurement of spin-lattice relaxation times in undercooled Ti^{3+} solutions by the method of continuous saturation

PERIODICAL: Fizika tverdogo tela, v. 4, no. 1, 1962, 96 - 98

TEXT: The longitudinal spin-lattice relaxation time T_1 in undercooled glycerol solutions of $TiCl_3 \cdot 6H_2O$ as a function of the concentration of Ti^{3+} ions has been measured at ν = 270 Mc/sec and 77°K by the method of continuous saturation. T_1 was calculated from Bloch's formula $Z = \left[1+0.25\gamma^2 H_1^2 T_1 T_2\right]^{-1}$, where Z is the saturation factor, γ is the gyromagnetic ratio, H_1 is the h-f field amplitude, and T_2 is the transverse relaxation time. H_1 was also determined with standard samples of αα-diphenyl picryl hydrazyl, and T_2 was calculated from the experimental width of the absorption curve. The dependence of T_1 on the Ti^{3+} concentration,

Card 1/3

Measurement of spin-lattice...

which can be seen from the measured values, is probably due to the change in symmetry of the intracrystalline electric field at the magnetic Ti^{3+} ion and to cross relaxation processes. The concentration dependence of T_1 of the Ti^{3+} ions in undercooled solutions containing 4 and 2 moles/l of $CoCl_2 \cdot 6H_2O$ was also studied. The shape of the e.p.r. lines is of the Lorentz type, and their width is virtually independent of the concentration. Saturation could not be achieved because of the considerable shortening of T_1. The slight dependence of ΔH on the concentration of Ti^{3+} ions and the Lorentz shape of the absorption lines are due to the fact that the Ti^{3+} ions are in the local alternating magnetic field of rapidly relaxing magnetic Co^{2+} ions. The variation in the line width ΔH, which can be estimated from $\Delta H \sim M_z' \tau + \Delta H_1$, and the spin-lattice relaxation times in undercooled solutions of $TiCl_3 \cdot 6H_2O$ containing 4 and 2 moles/l of $CoCl_2 \cdot 6H_2O$ are by no means due to the change in symmetry of the neighbor-

Card 2/3

hood of the magnetic Ti^{3+} ion. $M_z' = (4/5)g_{Ti}^2 g_{Co}^2 \beta^4 S_{Co}(S_{Co}+1)\sum \langle r_{1j}^{-6} \rangle$ is the mean square deviation of the local field generated by Co^{2+} ions from H_o, τ is the spin-lattice relaxation time of Co^{2+} ions, and ΔH_1 is the contribution of dipole-dipole interactions between Ti^{3+} ions. The liquids containing Co^{2+} ions behave toward dipole-induced line broadening like true liquids. There are 2 tables and 6 references: 4 Soviet and 2 non-Soviet. The two references to English-language publications read as follows: I. P. Goldslorugh, M. Mandel a. G. E. Pake. Phys. Rev. Lett., 4, 13, 1960; I. H. Van Vleck. Phys. Rev., 57, 426, 1952, 1940.

ASSOCIATION: Kazanskiy filial AN SSSR (Kazan' Branch AS USSR)

SUBMITTED: July 11, 1961

Card 3/3

GARIF'YANOV, N.S.; FEDOTOV, V.N.

Electron paramagnetic resonance in solutions of ammonium oxopentachloromolybdate. Zhur.strukt. khim. 3 no.6:711-712 '62. (MIRA 15:12)

1. Fiziko-tekhnicheskiy institut Kazanskogo filiala AN SSSR.
(Ammonium molybdate—Spectra)

S/181/62/004/012/025/052
B104/B102

AUTHORS: Garif'yanov, N. S., and Fedotov, V. N.

TITLE: Electron paramagnetic resonance in supercooled WCl_5 solutions

PERIODICAL: Fizika tverdogo tela, v. 4, no. 12, 1962, 3537-3539

TEXT: The e.p.r. lines of supercooled and liquid solutions of WCl_5 in ethanol, glycerol and hydrochloric acid were investigated at 450 and 9320 Mc/sec and at 77 and 295°K. The WCl_5 concentrations were ~ 0.01 mole/liter. In the solution of hydrochloric acid a symmetric e.p.r. line of the isotopes $W^{180, 182, 184, 186}$ having Gaussian form ($\delta H = 18 \pm 2$ oe, $g = 1.7$) was observed at 450 Mc/sec and 77°K. In the supercooled ethanol solution the line was slightly asymmetric. It was not possible to dissolve the hyperfine structure. At 9320 Mc/sec and 77°K the tungsten e.p.r. line is strongly asymmetric. The line shape is typical for such ions as have anisotropic g-factors. Glycerol: $g_{\parallel} = 1.79$, $g_{\perp} = 1.757$; hydrochloric acid: $g_{\parallel} = 1.78$; $g_{\perp} = 1.756$; ethanol:

Card 1/2

Electron paramagnetic resonance ... S/181/62/004/012/025/052
B104/B102

$g_{\parallel} = 1.77$; $g_{\perp} = 1.718$. The constants of the spectroscopic splitting are (in the same order as the solvents) 216, 220 and 148 ± 20 oe, i.e. > 150, > 150, -- oe. There are 1 figure and 1 table.

ASSOCIATION: Fiziko-tekhnicheskiy institut Kazanskogo filiala AN SSSR
(Physicotechnical Institute of the Kazan' Branch AS USSR)

SUBMITTED: July 9, 1962

Card 2/2

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24.7900

39475
S/056/62/043/002/003/053
B102/B104

AUTHORS: Garif'yanov, N. S., Fedotov, V. N.

TITLE: Electron paramagnetic resonance in liquid and supercooled solutions of pentavalent molybdenum

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43, no. 2(8), 1962, 376-381

TEXT: The Mo^{5+} ion is among the least studied paramagnetic ions. The authors studied the epr spectra for 450 and 9320 Mc/sec and 295, 220, and 77°K on $MoOCl_3$ (dissolved in acetone or ethanol), $MoCl_3$ (in glycerol), and Mo^{5+} in borax beads. Width, shape, and hyperfine structure of the Mo^{5+} epr lines were investigated, and the spin-lattice relaxation time T_1 measured for 260 Mc/sec by using the saturation technique and Bloch's formula. The epr spectrum can be well described by the axisymmetric Hamiltonian $\mathcal{H} = g_{\parallel}\beta H_z S_z + g_{\perp}\beta(H_x S_x + H_y S_y) + AI_z S_z + B(I_x S_x + I_y S_y)$ with S=1/2, I=5/2; A=83 oe, B=52±0.3 oe, $g_{\perp}$ =1.940, $g_{\parallel}$ = 1.965. At 450 Mc/sec, all samples

Card 1/3

show narrow symmetric epr lines. The wide lines at 9320 Mc/sec in ethanol and borax bead are due to the anisotropy of the g factor. The hyperfine structure peaks can be described by

$$H = H_0^* - am - \frac{a^2}{2H_0}\left[I(I+1)-m^2\right] - \frac{a^2}{2H_0}(2M-1) : E_0 = h\nu/g\beta,$$

a is the hyperfine splitting constant, m and M are respectively the magnetic quantum numbers of nucleus and shell electron; a = 56 ± 0.3 oe, g = 1.945 ± 0.002. This holds for $MoOCl_3$ in supercooled and liquid ethanol solutions for the isotopes Mo^{95} and Mo^{94}; ν = 9320 Mc/sec. The ratio of the nuclear magnetic moments is equal to that of the splitting constants (for $Mo^{95,97}$): $\mu_{97}/\mu_{95} = a_{97}/a_{95} = A_{97}/A_{95} = B_{97}/B_{95} = 1.02$. The spin-lattice relaxation time was $T_1 \sim 10^{-6}$ sec, the spin-spin relaxation time $T_2 \sim 10^{-8}$ sec. The Mo^{5+} concentrations were 0.005, 0.01, 0.05, and 0.2 moles/liter. The relaxation mechanism in the liquid state can be well

Electron paramagnetic resonance in ... S/056/62/043/002/003/053
B102/B104

described by the theory of Al'tshuler and Valiyev (ZhETF, 35, 947, 1958), and that in the solid state by Van Vleck's theory (Phys. Rev. 57, 426, 1940). There are 1 figure and 1 table.

ASSOCIATION: Fiziko-tekhnicheskiy institut Kazanskogo filiala Akademii nauk SSSR (Physicotechnical Institute of the Kazan' Branch of the Academy of Sciences USSR)

SUBMITTED: January 13, 1962

X

Card 3/3

FEDOTOV, V.N.; GARIF'YANOV, N.S.; KOZYREV, B.M.

Electron paramagnetic resonance in Nb^{4+}. Dokl.AN SSSR 145 no.6:1318-1320 Ag '62. (MIRA 15:8)

1. Kazanskiy filial AN SSSR. Predstavleno akademikom B.A. Arbuzovym.
(Niobium chloride) (Magnetic resonance and relaxation)

GARIF'YANOV, N.S.; KUCHERYAVENKO, N.S.; FEDOTOV, V.N.

Study of some solutions of pentavalent molybdenum by the electron paramagnetic resonance method. Dokl. AN SSSR 150 no.4:802-804 Je '63. (MIRA 16:6)

1. Fiziko-tekhnicheskiy institut Kazanskogo filiala AN SSSR. Predstavleno akademikom B.A. Arbuzovym.
(Molybdenum compounds—Spectra)

GARIF'YANOV, N. S.; FEDOTOV, V. N.; KUCHERYAVENKO, N. S.

Electron paramagnetic resonance and nuclear spin echo in oxyfluoride solutions of pentavalent molybdenum. Izv AN SSSR Ser Khim no. 4:743-745 Ap '64. (MIRA 17:5)

1. Fiziko-tekhnicheskiy institut Kazanskogo filiala AN SSSR.

GARIF'YANOV, N S.; KOZYREV, B.M.; FEDOTOV, V.

Electron paramagnetic resonance in thiocyanate complexes of Mo (V) and W (V). Dokl. AN SSSR 156 no. 3:641-643 '64.
(MIRA 17:5)

1. Kazanskiy fiziko-tekhnicheskiy institut AN SSSR. Predstavleno akademikom A. Ye.Arbuzovym.

L 56561-65 EWT(l)/EWA(h) Peb

ACCESSION NR: AP5015564 UR/0216/65/000/008/0127/0127

AUTHORS: Fedotov, V. N.; Reyfman, M. P. 12 B

TITLE: Device for contactless pulse shaping. Class 83, No. 170391

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 8, 1965, 127

TOPIC TAGS: clock

ABSTRACT: This Author Certificate presents a device for contactless shaping of pulses for primary electric clocks with pulse transmission at minute intervals into the line of secondary clocks and instruments. It contains a transistor controlled by contacts interacting with detents positioned diametrically opposite on the rim of a disk placed on the driving shaft of the clock mechanism. There is also a system for inverting the polarity of the electric pulses, which is controlled by a sector placed coaxially with the detent disk. To simplify the electric circuit of the device, the pulse polarity inversion system is in the form of a contact group.

ASSOCIATION: none

SUBMITTED: 25Feb63 ENCL: 00 SUB CODE: EC, NO

NO REF SOV: 000 OTHER: 000

Card 1/1

GARIF'YANOV, N.S.; KOZYREV, B.M.; FEDOTOV, V.N.

Electron paramagnetic resonance in Mo (V) complexes with diethyl-phosphorodithioic acid. Teoret. i eksper. khim. 1 no.1:118-122 Ja-F '65. (MIRA 18:7)

1. Kazanskiy fiziko-tekhnicheskiy institut AN SSSR.

L 24761-66 EWI(m)/EWP(i)/T RM

ACC NR: AP6015540 SOURCE CODE: UR/0379/65/001/001/0118/0122

AUTHOR: Garif'yanov, N. S.; Kozyrev, B. M.; Fedotov, V. N.

43
B

ORG: Kazan' Physicotechnical Institute, AN SSSR (Kazanskiy fiziko-tekhnicheskiy institut AN SSSR)

TITLE: Electron paramagnetic resonance in complexes of Mo(V) with diethyldithiophosphoric acid

SOURCE: Teoreticheskaya i eksperimental'naya khimiya, v. 1, no. 1, 1965, 118-122

TOPIC TAGS: electron parametric resonance, complex molecule, molybdenum, organic phosphorus compound, solvent extraction

ABSTRACT: The EPR method was used to study complexes of pentavalent molybdenum with diethyldithiophosphoric acid. The experiments were conducted at frequencies of 9320 megacycles and 300 megacycles at room temperature and at 77°K. The complexes were prepared by the action of diethyldithiophosphoric acid on aqueous solutions of oxyfluoride, oxychloride, oxybromide, and oxysulfate of Mo(V), strongly acidified by HF, HCl, HBr, or H_2SO_4. The EPR spectra were investigated in both polar and nonpolar solvents, capable of extracting Mo(V) complexes from the initial solution, namely: carbon tetrachloride, benzene, toluene, diethylester, and ethanol. The EPR spectra of complexes of M(V) dissolved in excess diethyldithiophosphoric acid were also studied. It was concluded that the complex studied has the form of an axially distorted octahedron. The authors thank I. P. Lipatova for her carrying out the infrared spectra measurements in liquid solutions. Orig. art. has: 1 figure and 2 formulas. [JPRS]

SUB CODE: 07, 20 / SUBM DATE: 20Nov64 / ORIG REF: 004

Card 1/1 UDC

NIKOLAYENKO, N.S.; FEDOTOV, V.P.

Transistorized current converters. Izv.vys.ucheb.zav.; prib. 4 no.6:17-25 '61. (MIRA 14:12)

1. Leningradskiy elektrotekhnicheskiy institut imeni Ul'yanova-Lenina. Rekomendovana kafedroy elektroizmeritel'noy tekhniki.
(Electric current converters)

NIKOLAYENKO, N.S.; FEDOTOV, V.P.

Transistor circuit as a converter of weak d.c. to a.c.
Izv.vys.uchab.zav.; prib. 5 no.1:16-26 '62. (MIRA 15:2)

1. Leningradskiy elektrotekhnicheskiy institut imeni V.I. Ul'yanova (Lenina). Rekomendovana kafedroy elektroizmeritel'noy tekhniki.

(Transistor circuits)

NIKOLAYENKO, N.S.; FEDOTOV, V.P.

Measuring transistorized d.c. converter and its use.
Priborostroenie no.11:18-20 N '62. (MIRA 15:12)
(Electric current converters)

S/146/63/006/001/001/014
D201/D308

AUTHORS: Nikolayenko, N. S. and Fedotov, V. P.

TITLE: Special features in the use of silicon transistors as d.c. to a.c. converters for small signals

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye, v. 6, no. 1, 1963, 19-26

TEXT: The authors analyze germanium and silicon transistors from the point of view of their use as choppers in d.c. amplifiers and describe the methods of their selection and of the design of circuit components: A chopper circuit for a wide temperature range of operation, utilizing a silicon transistor with saturation voltage compensation is described. The theory and experimental investigation of the transistor characteristics show that, for small d.c. signal conversion, the silicon transistors give a better performance in the presence of a wide temperature range. They are much inferior, however, to germanium transistors where reproducibility, economy and simplicity of design are of importance. The use of silicon

Card 1/2

S/146/63/006/001/001/014
D201/D308

Special features in ...

transistors should, therefore, be restricted to converters operating at high ambient temperatures and in conjunction with d.c. sources having high internal resistance. There are 4 figures.

ASSOCIATION: Leningradskiy elektrotekhnicheskiy institut im. V. I. Ul'yanova (Lenina) (Leningrad Institute of Electrical Engineering im. V. I. Ul'yanov (Lenin))

SUBMITTED: November 25, 1961

Card 2/2

FEDOTOV, V.P.

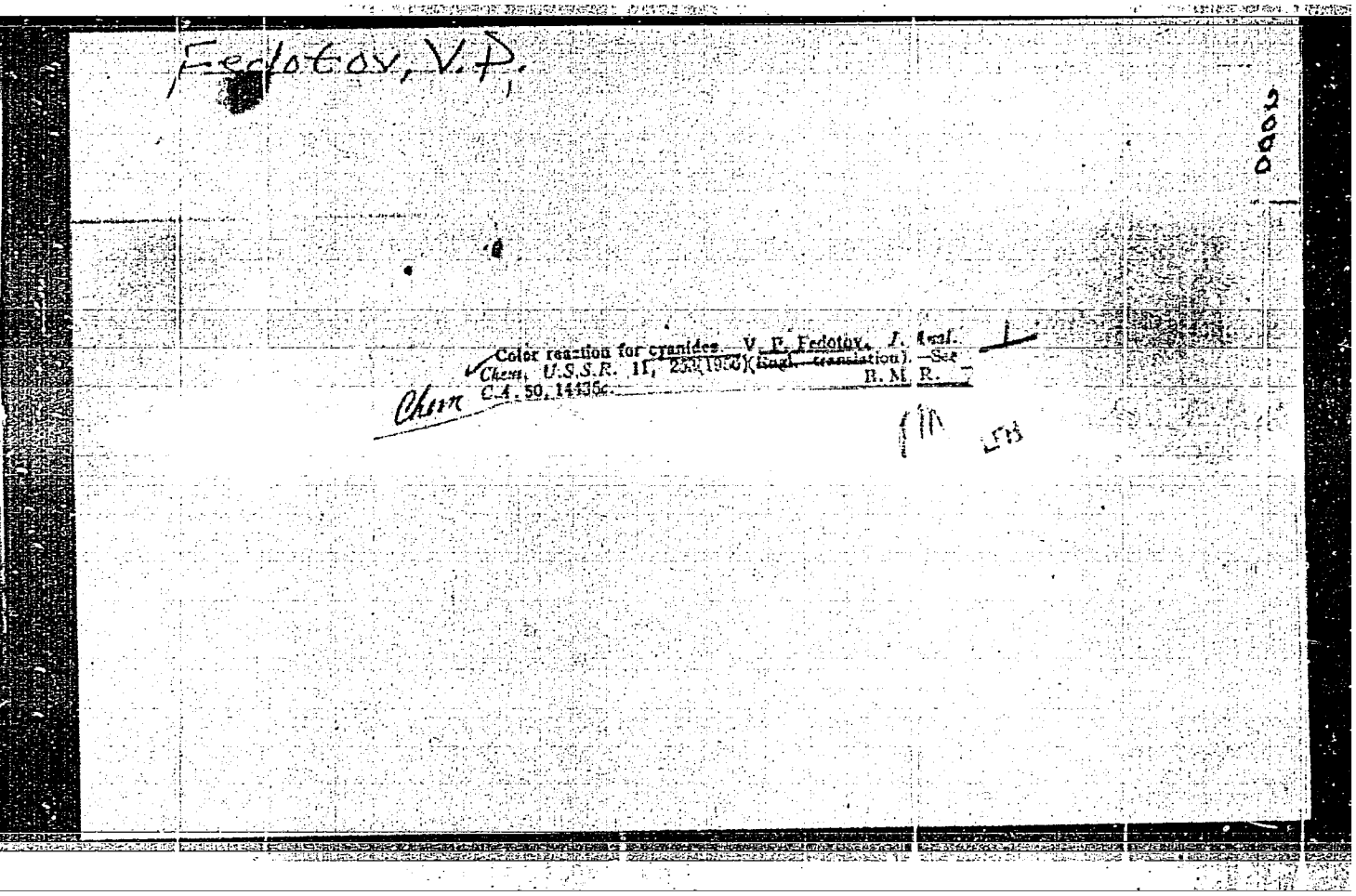
PROCESSES AND PROPERTIES INDEX

Determination of the oxidizability of water by a cold method. V. P. Fedotov. *Voenno Sanit. Delo* 1938, No. 11, 62-7; *Chem. Zentr.* 1939, II, 1516.—Instead of the usual method for detg. oxidizable (org.) matter in tap water by heating with $KMnO_4$, a cold method using alk. KI-starch soln. with the addn. of Na_2SO_3 is recommended. One cc. of the soln. corresponds to 0.25 cc. O_2. The use of the method for investigations on well, tap or river waters is explained. The reagent can be kept for 6 months. W. A. Moore

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

FEDOTOV, V.P.

The Solubility of Oxygen in Liquid Nickel and Nickel–Iron Alloys. A. M. [illegible] [illegible] — Izvest. Akad. Nauk S.S.S.R., 1956, (Tekh.), (9), 115–1[illegible]. — (In Russian). The data obtained by S. and F. agree broadly with those of Wriedt and Chipman (Trans. Amer. Inst. Min. Met. Eng., 1956, 206, 477; M.A., 23, 8) and very well with those of Krupkowski and Balicki. It was assumed that, during the oxidation of liq. Ni, the soln. of O in the metal and the penetration of NiO into the liquid take place. W. and C. took the value of the heat of soln. of oxides for all compn. of Fe and Ni as equal or similar to that for pure Fe; this is not correct, especially for Ni-rich alloys. The solubility of O in alloys contg. 80–95% Ni is much higher than the value from W. and C.'s assumption. 7 ref. — N. E. B.



Fedotov, V.P.

0902

Color reaction for cyanides. V. P. Fedotov. J. Anal. Chem. U.S.S.R. 11, 230 (1956) (Engl. translation). See C.A. 50, 14436c. B. M. R.

Chem

FEDOTOV, V.P., SAMARIN, A.M.

"Solubility of Nitrogen in Iron Melt and Silicon,"
lecture given at the Fourth Conference on Steelmaking, A.A. Baikov Institute of Metallurgy, Moscwo, July - 1-6 1957.

FEDOTOV, V.P., Candidate Tech Sci (diss) -- "The solubility of nitrogen in liquid iron and melts of iron and silicon". Moscow, 1959. 9 pp (Acad Sci USSR, Inst of Metallurgy im A. A. Baykov) 150 copies (KL, No 24, 1959, 142)

18(3) SOV/20-122-4-15/57

AUTHORS: Fedotov, V. P., Samarin, A. M., Corresponding Member, Academy of Sciences, USSR

TITLE: The Solubility of Nitrogen in Liquid Iron and in Melts of Iron and Silicon (Rastvorimost' azota v zhidkom zheleze i rasplavakh zheleza i kremniya)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 122, Nr 4, pp 597-599 (USSR)

ABSTRACT: This paper deals with the following problem: The solubility of nitrogen in melts of iron and silicon are to be determined, the causes of the discrepancies in the previous investigation and of the anomalous behavior of nitrogen in these melts are to be found. The apparatus for the investigation of the solubility of nitrogen was described in a previous paper (Ref 6). Carbonyl iron, silicon KrO and silicon of the kind 99,99 were used as initial materials. The authors investigated 4 series of melts, the preparation of which is described. The following conclusions can be drawn from the experimental results obtained: The solubility of nitrogen in liquid iron depends on the content of oxygen in iron (i.e.

Card 1/3

The Solubility of Nitrogen in Liquid Iron and in Melts of Iron and Silicon

on the oxygen bound in the oxides and also on the oxygen contained in the solution). The discrepancy between the results of the previous papers on this subject are caused not only by the different experimental errors, but also by the neglect of the influence of oxygen on the solubility of nitrogen in liquid iron. The solubility of nitrogen in liquid iron and in melts of iron and silicon (if their content of oxygen is of medium value) grows with increasing temperature and decreases with the increase of the silicon concentration. Moreover, this solubility of nitrogen satisfies the law of A. Sieverts (Siverts, Ref 1) for the influence of the pressure. The rate of the cooling of the melt from the experimental temperature to the point of solidification exercises considerable influence on solubility . The content of nitrogen in iron and in iron-silicon alloys can be diminished by tempering in a vacuum and in a helium atmosphere at 1100-1350° for 24 - 72 hours. Such a treatment in a vacuum noticeably purifies iron and its alloys with silicon. There are 2 figures, 3 tables, and 6 references, 2 of which are Soviet.

SOV/2o-122-4-15/57

The Solubility of Nitrogen in Liquid Iron and in Melts of Iron and Silicon

ASSOCIATION: Institut metallurgii im. A. A. Baykova Akademii nauk SSSR (Institute of Metallurgy imeni A. A. Baykov, Academy of Sciences, USSR)

SUBMITTED: June 19, 1958

Card 3/3

FEDOTOV, V.P.; SKLYARENKO, M.S.; SAMARIN, A.M.

Razrabotka metoda polucheniya zheleza vysckoy stepeni chistoty i yekotorye ego svoystva.

report submitted for the 5th Physical Chemical Conference on Steel Production.

Moscow 30 JUN 1959

SOV/120-59-2-40/50

AUTHORS: Bogomolov, V.N., Nikolayenko, N.S. and Fedotov, V.P.

TITLE: A D.C.-A.C. Convertor Based on the Use of the Hall Effect (Preobrazovatel' postoyannogo toka v peremennyy, osnovannyy na ispol'zovanii effekta Kholla)

PERIODICAL: Pribory i tekhnika eksperimenta, 1959, Nr 2, pp 134-135 (USSR)

ABSTRACT: A cross-section through the device is in Fig 1. It is 40 mm in diameter and 40 mm high and consists of a permalloy screen surrounding a toroidal coil with a KhVP core. The coil is designed to accept 50 c/s at 6.3 V and draws 0.2 A. The power dissipation is 0.2 W. The semi-conductor wafer (5 x 3.5 x 0.3 mm^3) of n-type 8 ohm cm germanium is secured by epoxy resin in an air gap in the core. It has an input resistance of 100 ohms and an output resistance of 500 ohms. The current conversion ratio DC-AC is 20%. The effective flux density is 15000 gauss. The voltage transfer coefficient is 1.2-1.3 per 1000 gauss of field. A compensating coil is also included, as in Fig 2, to increase sensitivity and thermal stability. The converter is intended for operation with the EPP-09 recording potentiometer. The systematic and random components of error are both 0.2%

Card 1/2

A D.C.-A.C. Converter Based on the Use of the Hall Effect

and the sensitivity is 5 micro watts. The temperature coefficient is 0.01 % per degree centigrade and the sensitivity falls with temperature. The converter is insensitive to ± 10% change in supply voltage, ± 5% change in supply frequency and the effects of moisture. It is suggested that the unit find application as a computing element or in a d.c. amplifier. V.I. Pogodin is thanked for his assistance.

Card 2/2 There are 2 figures.

ASSOCIATION: Institut poluprovodnikov AN SSSR
(Semiconductor Institute of the Ac. Sc. USSR)

SUBMITTED: April 5, 1958

S/020/61/139/006/014/022
B103/B101

AUTHORS: Baratashvili, I. B., Fedotov, V. P., Samarin, A. M., Corresponding Member AS USSR, and Berezhiani, V. M.

TITLE: Solubility of nitrogen in liquid manganese

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 139, no. 6, 1961, 1354-1355

TEXT: Since the data published on the solubility of nitrogen in liquid manganese are contradictory, the authors studied this problem by the method of dynamic equilibrium established between liquid manganese and nitrogen or a nitrogen - hydrogen mixture. The activity of N_2 in the metal corresponds to the partial pressure of N_2 in the gaseous phase at the instant of equilibration. The nitrogen content corresponding to the equilibrium was determined in a specimen of the solid, rapidly cooled metal. Methods and apparatus were described by A. M. Samarin, V. P. Fedotov (Tr. IV Konfer. po fiziko-khimicheskim osnovam proizvodstva stali (Proceedings of the 4th Conference on the Physicochemical Fundamentals of Steel Production)Izd. AN SSSR, 1960, p. 144). The metal

Solubility of nitrogen in liquid ...

was heated with an ЛГ-60 (LG-60) h-f tube generator. Mn melt was purified with purified hydrogen (400 ml/min) for 1 hr. Subsequently, it was cooled and again molten (Test series I and II). The melt was subjected to the action of N_2 or N_2+H_2 for 120 - 180 min at a given temperature and with a given consumption of H_2 and N_2 (40 and 1100 ml/min, respectively) (series I). In the second series, the treatment was performed within 30, 60, 90, and 120 min. In the third series, Mn with a nitrogen content of 3.3 and 6.0% was treated as stated above but without previous purification in H_2. The nitrogen content of Mn was chemically determined. It is noted that equilibrium at the same temperature is attained both by saturating the Mn melt with nitrogen and by denitrifying the nitrogen-containing Mn. Keeping the manganese in the gas current for 1 hr is sufficient for reaching equilibrium. The solubility of nitrogen decreases with increasing temperature. This function is given by $1/2\ N_{2(g)} \rightleftarrows [\%\ N]$, $K = a_N/P_{N_2}^{1/2} = f_N[\%\ N]/P_{N_2}^{1/2}$ (1). As a standard state, an Mn melt is taken, which is in

Card 2/3

equilibrium with N_2 having a pressure of 1 atm. Accoriing to experimental data, the following relations are obtained for P_{N_2} = 1 atm and f_N = 1:

$$\log K = \log[\% N] = 3010/T - 1.457; \quad (2);$$

$$\Delta F^\circ = - 13,780 + 6.65\ T \quad (3).$$

There are 2 figures and 6 references: 3 Soviet and 3 non-Soviet.

ASSOCIATION: Institut metallurgii im. A. A. Baykova Akademii nauk SSSR (Institute of Metallurgy imeni A. A. Baykov, Academy of Sciences USSR)

SUBMITTED: April 29, 1961

Card 3/3

S/020/61/140/002/022/023
B130/B110

AUTHORS: Baratashvili, I. B., Fedotov, V. P., Samarin, A. M., and Berezhiani, V. M., Corresponding Member AS USSR

TITLE: Solubility of nitrogen in manganese-iron and manganese-silicon melts

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 140, no. 2, 1961, 423-425

TEXT: The solubility of nitrogen and nitrogen-hydrogen mixtures in Mn-Fe and Mn-Si melts is calculated by the method of dynamic equilibrium between melt and gaseous phase. Apparatus and method were the same as indicated by A. M. Samarin, V. P. Fedotov (Tr. IV Konfer. po fiziko-khimicheskim osnovam proizvodstva stali, Izd. AN SSSR, 1960, p. 144). The Fe and Si content changed during melting by 2-3%. Results of determination of the solubility of nitrogen are given in Figs. 1 and 2. From the experimental data, the dependence of the coefficient of nitrogen activity in Mn-Fe and Mn-Si melts on the Fe and Si concentration in the melts is given:

$$a_N^{Mn} = f_N[\%N]_{Mn}, \quad a_N^{Mn-Si(Fe)} = f_N[\%N]_{Mn-Si(Fe)} \qquad (a).$$

Card 1/2

Thus, at constant pressure and constant temperature under equilibrium conditions,

$$a_N^{Mn} = a_N^{Mn-Si(Fe)}, \quad f_N'[\%N]_{Mn} = f_N'[\%N]_{Mn-Si(Fe)} \qquad (b).$$

The solubility of nitrogen in liquid Mn at p_{N_2} = 1 atm and T = const is taken as standard. Then, $f'_N = 1$ and $f_N = \frac{[\%N]_{Mn}}{[\%N]_{Mn-Si(Fe)}}$ (1). Si causes a stronger decrease of N solubility than Fe. Also an increase in the temperature of the melt reduces the N solubility (Fig. 4). log K and ΔF^o were calculated from the experimental data given in Fig. 4. Calculation results are given in Table 1. There are 4 figures, 1 table, and 3 Soviet references.

ASSOCIATION: Institut Metallurgii im. A. A. Baykova Akademii nauk SSSR (Institute of Metallurgy imeni A. A. Baykov of the Academy of Sciences USSR)

SUBMITTED: May 11, 1961

S/146/61/004/006/003/020
D249/D301

AUTHORS: Nikolayenko, N. S. and Fedotov, V. P.

TITLE: Current converters with semiconductor triodes

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye, v. 4, no. 6, 1961, 17-25

TEXT: A general description is given of converters of small d.c. signals into a.c. signals by semiconductor triodes which is compiled from literature. Characteristics of the semiconductor triode as a converter, compensation of residual parameters and characteristics of the converter in amplifier circuits for direct current are considered. There are 6 figures and 17 references: 4 Soviet-bloc and 13 non-Soviet-bloc. The 4 most recent references to the English-language publications read as follows: A. Gill, Transistor Switch design, Electronics, 1958, XII no. 49, 97; R. B. Hurley, Transistorized low-level choppers circuits, Electr. Industry, no. 12, 1956; B. T. Barber, L. S. Klivan, Servo Modulators - III, Semiconductor modulators, magnetic modulators, tabulated characte-

Card 1/2

Current converters with ...

S/146/61/004/006/003/020
D249/D301

ristics, Control. Engng. 1957, 4, no. 11, 122-131; B. T. Barber, Servor Modulators - I. Where and why they are used, Control. Engng. 1957, 4, no. 8, 65. This article was recommended by the Kafedra elektroizmeritel'noy tekhniki (Department of Electrical-Measuring Techniques).

ASSOCIATION: Leningradskiy elektrotekhnicheskiy institut im. V.I. Ul'yanova (Lenina) (Leningrad Electrotechnical Institute im. V. I. Ul'yanov (Lenin))

SUBMITTED: February 27, 1961

Card 2/2

BARATASHVILI, I.B.; FEDOTOV, V.P.; SAMARIN, A.M.; BEREZHIANI, V.M.

Solubility of nitrogen in liquid manganese. Dokl. AN SSSR 139 no.6:1354-1355 Ag '61. (MIRA 14:8)

1. Institut metallurgii im. A.A. Baykova AN SSSR. 2. Chlen-korrespondent AN SSSR (for Samarin).
(Nitrogen) (Manganese)

BARATASHVILI, I.B.; FEDOTOV, V.P.; SAMARIN, A.M.; BEREZHIANI, V.M.

Solubility of nitrogen in manganese-iron, and manganese-silicon melts. Dokl. AN SSSR 140 no.2:423-425 S '61. (MIRA 14:9)

1. Institut metallurgii im. A.A.Baykova AN SSSR. 2. Chlen-korrespondent AN SSSR (for Samarin).
(Nitrogen) (Manganese alloys)

S/146/62/005/001/003/011
D234/D302

AUTHORS: Nikolayenko, N.S. and Fedotov, V.P.

TITLE: A semiconductor triode in the regime of transformation of small d.c. into a.c.

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye, v. 5, no. 1, 1962, 16-26

TEXT: The authors determine the residual voltage and current and the resistance between the emitter and collector for the case stated and give a relation between these parameters and the current amplification factor and inverse transition currents. Temperature dependence of the parameters in a transformation regime is analyzed. Theoretical and experimental values of several dependences are compared. It is concluded that comparatively good stabilization in a wide temperature range is only possible when the load resistance is of the order of several hundreds of ohms or less. For high resistances silicone triodes are recommended. There are 5 figures and 8 references: 5 Soviet-bloc and 3 non-Soviet-bloc. The references

Card 1/2

S/146/62/005/001/003/011
D234/D302

A semiconductor triode in ...

to the English-language publications read as follows: J.J.S. Ebers, and J.J.L. Moll, Large-signal behaviour of junction transistors. Proc. I.R.E, 1954, Dec. 142.; E. Steele, Theory of a p-n-p diffused junction transistors. PIRE, 1952, 40, 1424.

ASSOCIATION: Leningradskiy elektrotekhnicheskiy institut im. V.I. Ul'yanova (Lenina) (Leningrad Institute of Electrical Engineering im. V.I. Ul'yanov (Lenin))

SUBMITTED: February 27, 1961

Card 2/2

MIKHEYEV, N.I.; BULYGIN, I.P.; MAKSIMOVA, N.A.; FEDOTOV, V.P.

Apparatus for mechanical testing at temperatures up to 2000°C. Zav.lab. 29 no.3:371-375 '63. (MIRA 16:2)
(Metals at high temperatures)
(Testing machines)

L 24235-66 EWT(m)
ACC NR: AP6014671 SOURCE CODE: UR/0241/65/010/010/0057/0061

AUTHOR: Moroz, B. B.; Bezin, G. I.; Grozdov, S. P.; Lebedev, B. I.; Vasil'yevskaya, V. G.--Vasilievskaya, V. V.; Ponomar'kov, V. I.--Ponomarkov, V. I.; Fedorovskiy, L. L.--Fedorovsky, L. L.; Fedotov, V. P.

ORG: none

TITLE: Experimental Po sup 210 - induced chronic radiation sickness

SOURCE: Meditsinskaya radiologiya, v. 10, no. 10, 1965, 57-61

TOPIC TAGS: polonium, radiation sickness, dog, alpha radiation, radiology

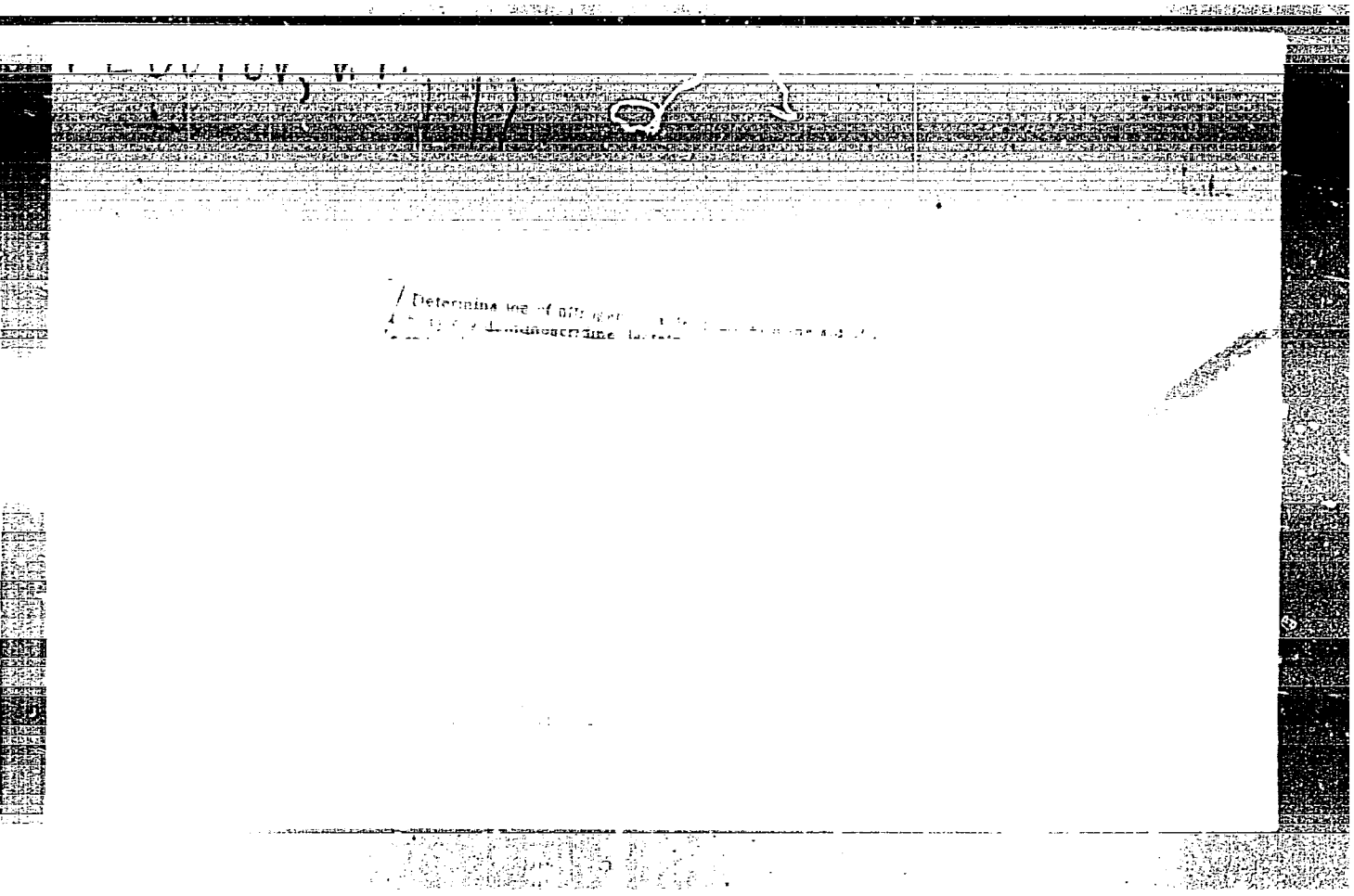
ABSTRACT: The article describes the features of the clinical course and variation of certain functions in dogs with chronic radiation sickness caused by a single subcutaneous injection of Po^{210} (0.003 microcuries per kg body weight). A prolonged initial period of relative clinical well-being was observed, with a developed picture of radiation sickness setting in only after some 3 months and with the dogs dying off individually after a period of from 128 to 310 days. The distribution of Po^{210} throughout the tissues and organs, which resulted in a constant local alpha-irradiation of the latter, evidently played a major role in the genesis of these disturbances, with gradual increment in the tissue dose, which after 6-9 months reached 1,100-1,400 rads. During the period of distinct radiation sickness the dogs displayed lethargy, lack of appetite, periodic diarrhea, and thirst, along with spontaneous bleeding of the oral mucosa and spontaneous hemorrhages of the rectum and

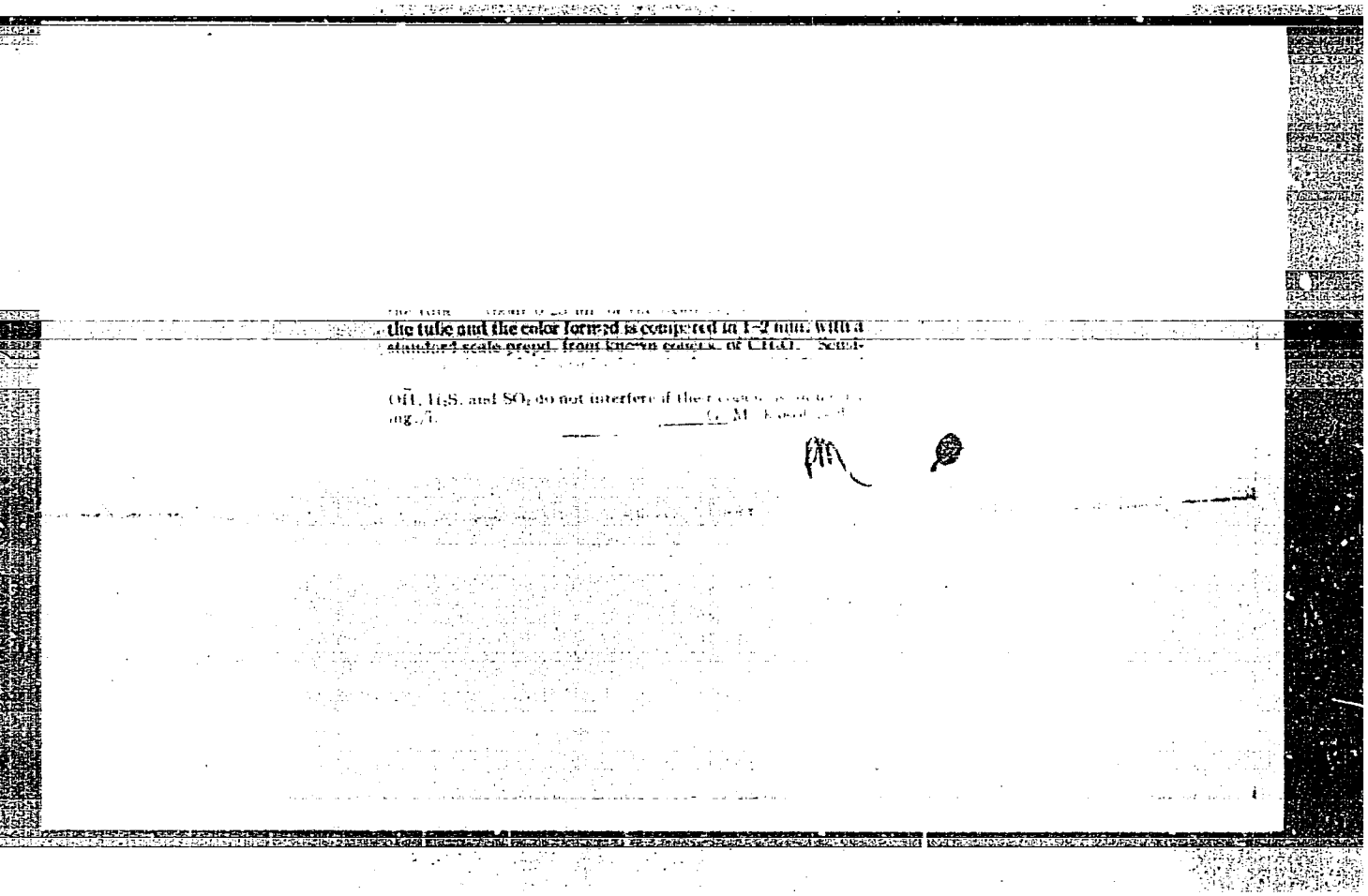
Card 1/2 UDC: 617-001.28-008.939.65

urinary tract. Shortly before death, the state of the dogs sharply deteriorated; they moved with difficulty, refused food, and vomitted bile and blood. Rectal temperature rose; the pulse was quick, arrhythmic, and arterial pressure fell. With these symptoms, the dogs died. It was accompanied by deep trophic disturbances due to a combination of mechanisms, each of which by itself may cause trophic changes: disturbances in neuroendocrine regulations with insufficiency of the adrenal cortex; metabolic disorders, hemodynamic disorders, and chronic hypoxia, as well as the constant direct local effect of the alpha-emitter on the tissues. Anatomo-pathological dissection revealed that state of general dystrophy which is so characteristic of polonium poisoning and is not encountered when other radioactive isotopes pervade the organism. Orig. art. has: 4 tables. [JPRS]

SUB CODE: 06 / SUBM DATE: 25Aug64 / ORIG REF: 009

Sanitary-Epidemiology Dept., Rostov-on-Don





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OH, H_2S, and SO_2 do not interfere if the

mg./l.

FEDOTOV, V. P.: Master Med Sci (diss) -- "The state of the carbohydrate function of the liver in dogs injured by polonium". Moscow, 1958. 14 pp (Acad Med Sci USSR), 250 copies (KL, No 8, 1959, 139)

EXCERPTA MEDICA Sec 2 Vol 12/11 Physiology Nov 59

4998. DISTURBANCE OF THE SUGAR-FIXING FUNCTION IN POLONIUM-POISONED ANIMALS (Russian text) - Fedotov V. P. - MED. RADIOL. 1958, 3/6 (46-50) Graphs 3

The sugar-fixing capacity of the liver was studied in dogs with polonium poisoning. Experiments were conducted on angiostomized dogs with cannulas in the portal and hepatic veins. Alimentary glucose loading was used to establish the sugar-fixing capacity of the liver. It was shown that the degree of sugar retention by the liver depended on the sugar concentration in the blood flowing to the liver. In alimentary hyperglycaemia of healthy animals the liver retained about 21-22% of the additional sugar in the inflowing blood. The sugar-fixing capacity of the liver decreased during radiation sickness. At the terminal stage of the disease, only 5 to 10% of the additional sugar was fixed by the liver. (XIV, 2, 5)

FEDOROVA, T.A.; FEDOTOV, V.P.; MERTUMOVA, N.A. (Moskva)

Uric acid and allantoin in the urine and blood of animals exposed to ionizing radiations. Biul. eksp. biol. i med. 47 no.3:44-49 Mr '59. (MIRA 12:7)

1. Predstavlena deystvitel'nym chlenom AMN SSSR A.Ye. Braunshteynom.

(HYDANTOINS, metab.
allantoin in blood & urine, eff. of lethal doses of radiations in animals (Rus))
(URIC ACID, metab.
blood & urine, eff. of lethal dose irradiation in animals (Rus))
(RADIATIONS, effects,
on blood & urine allantoin & uric acid in animals, lethal dose (Rus)

PROTASOV, A.I., dotsent; SINEV, A.V., prof.; SMIRNOV, A.M., dotsent; BAZHENOV, A.N., dotsent; VIL'NER, A.M., prof.; BASHMURIN, A.F., dotsent; SHAKALOV, K.I., prof.; VELLER, A.A., prof.; NIKANOROV, V.A., prof.; FEDOTOV, V.P., dotsent; KUZNETSOV, G.S., prof.; BOCHAROV, I.A., prof.; SHCHERBATYKH, P.Ya., prof.; TSION, R.A., prof.; GRIBANOVSKAYA, Ye.Ya., dotsent; ADAMANIS, V.F., assistent; KOLABSKIY, N.A., dotsent; MITSKEVICH, V.Yu., dotsent; GUSEVA, N.V., dotsent; MYSHKIN, P.P., dotsent; GUBAREVICH, Ya.G., prof.; FEDOTOV, B.N., prof.; DOBIN, M.A., dotsent; SIROTKIN, V.A., prof. [deceased]; KUZ'MIN, V.V., prof.; YEVDOKIMOV, P.D., prof.; POLYAKOV, A.A., prof.; POLYAKOV, P.Ya., red.; BARANOVA, L.G., tekhn.red.

[Concise handbook for the veterinarian] Kratkii spravochnik veterinarnogo vracha. Leningrad, Gos.izd-vo sel'khoz.lit-ry, 1960. 624 p. (MIRA 13:12)

(Veterinary medicine)

FEDOROVA, T.A.; FEDOTOV, V.P.

Role of the liver in the metabolism of uric acid and allantoin in radiation sickness. Vop.med.khim. 6 no.5:497-500 S-O '60. (MIRA 14:1)

(RADIATION SICKNESS) (LIVER)
(URIC ACID) (HYDANTOINS)

SALISHCHEV, D.S.; FEDOTOV, V.P.; SIDORENKO, V.M., gornyy inzh.; PROTAS, N.T., gornyy inzhener; NIKITIN, I.P., gornyy inzhener

"Improve the work of underground sections" by IA.D.Grossman, E.M. Kozakov. Reviewed by D.S.Salishchev and others. Gor.zhur. no.5: 8-13 My '61. (MIRA 14:6)

1. Glavnyy inzhener Tashtagol'skogo zheleznogo rudnika (for Salishchev). 2. Nachal'nik otdela truda i zarabotnoy platy Tashtagol'skogo zheleznogo rudnika (for Fedotov). 3. Shakhta "Bol'shevik," Krivoy Rog (for Sidorenko). 4. Shakhta "Novaya" rudoupravleniya imeni K.Libknekhta (for Protas). 5. Krivorozhskiy filial Instituta gornogo dela AN USSR.

(Mine engineering) (Mine management)
(Grossman, IA.D.) (Kozakov, E.M.)

FEDOTOV, V.P.

Unit for the aspiration of air. Voen. med. zhur. no.10:81 O '65. (MIRA 18:11)

FEDOTOV, V.P.; BEZIN, G.I.

Mechanism of gas exchange disturbance in dogs with radiation sickness caused by Po^{210}. Radiobiologiia 5 no.4:522-524 '65. (MIRA 18:9)

MOROZ, B.B.; BEZIN, G.I.; VASIL'YEVSKAYA, V.G.; GROZDOV, G.P.; LEBEDEV, B.I.; PONOMAR'KOV, V.I.; FEDOROVSKIY, L.L.; FEDOTOV, V.P.

Experimental chronic radiation sickness induced by Po^{210}. Med. rad. 10 no.10:57-61 O '65. (MIRA 18:12)

1. Submitted August 25, 1964.

L 54643-65

ACCESSION NR: AP5010342 UR/0205/65/005/002/0221/0226

AUTHOR: Gorizontov, P. D.; Moroz, B. B.; Fedotov, V. P.; Bibikova, A. F.; Yevseyeva, N. K. 15 B

TITLE: Significance of neuroendocrine changes in remote effects resulting from ionizing radiation

SOURCE: Radiobiologiya, v. 5, no. 2, 1965, 221-226

TOPIC TAGS: animal, dog, radiation sickness, remote radiation effect, endocrinology, neuroendocrine system, hypophysis, adrenal gland, adrenal cortex, hypothalamus, deficiency disease, collagen, early aging, corticosteroid

ABSTRACT: Fifteen dogs who had recovered from acute radiation sickness resulting from gamma-neutron irradiation of 300 ber were investigated 3-5 yrs later to determine the state of the hypophysis and adrenal cortex system. Glucocorticoid and mineralocorticoid investigations of adrenal gland functions revealed that 12 of the 15 dogs had developed interrenal deficiency symptoms. Typical remote effects included nonuniform local damage of the adrenal glands which

Card 1/3

L 54643-65

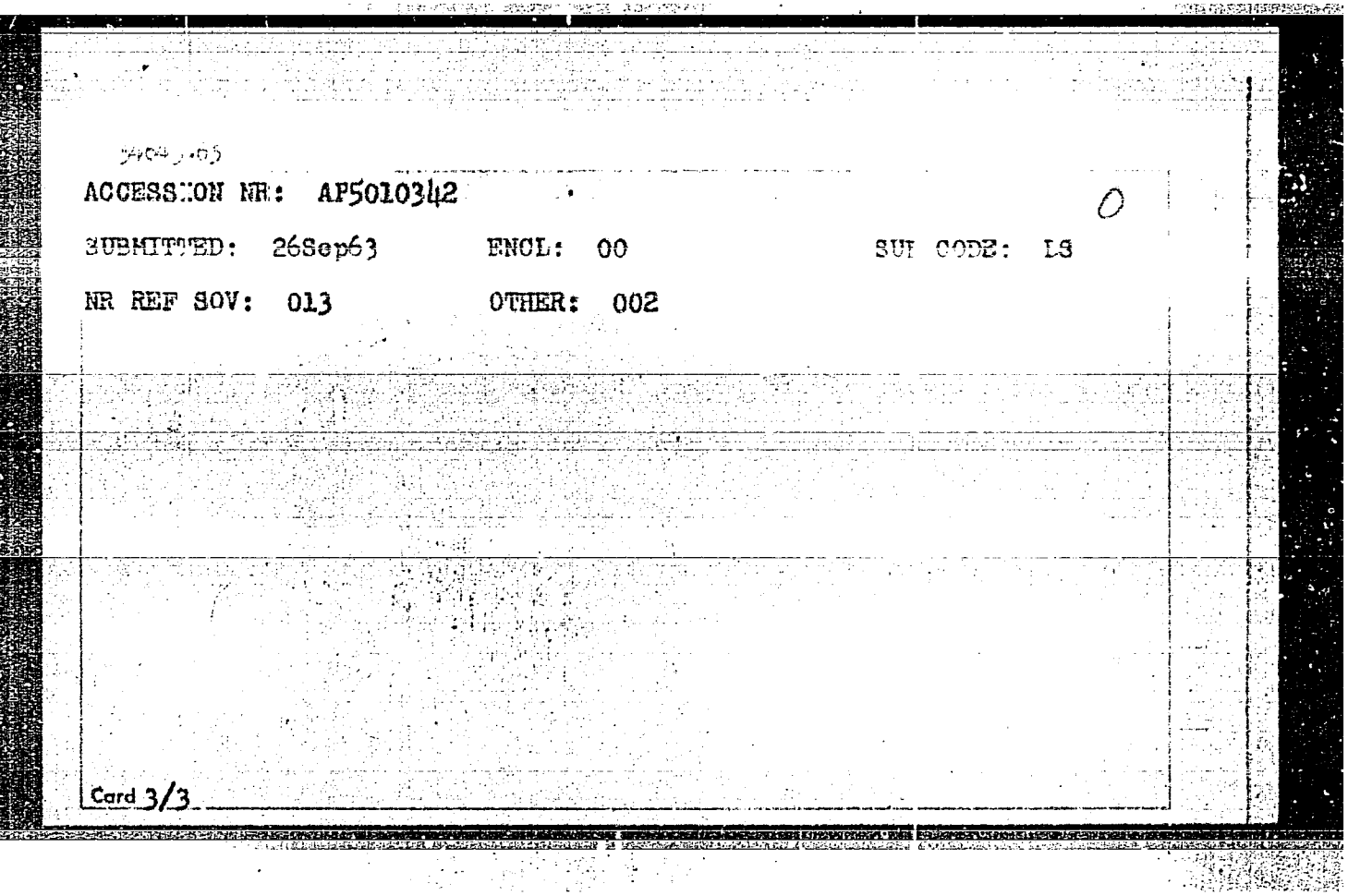
ACCESSION NR: AP5010342 0

appears to be related to selective damage of the synthetic processes in different areas of the adrenal cortex. In analyzing the mechanism of the hypofunctional state of the adrenal cortex, two possible explanations are offered: 1) hypophysis damage may affect the adrenal cortex by changes in the mechanisms regulating hormone formation, and 2) adrenal cortex deficiency may be the result of irradiated organism tissues using more corticosteroids. Morphological examinations considerable destructive changes. Functional activity is ... cortex and growth of collagen tissue in the ... important factors in the genesis of early aging in irradiated animals. ... combination of the hypophysis and adrenal ... atrophy of the internal organs and arteriosclerotic changes on one hand, and with hypofunction leading to trophic processes and early ... the other, balancing of neuroendocrine ... an important problem in remote ... pathology.

Orig. art. has: 5 figures.

ASSOCIATION: None.

Card 2/3



ACCESSION NR: AP5010342

SUBMITTED: 26Sep63 ENCL: 00 SUB CODE: LS

NR REF SOV: 013 OTHER: 002

Card 3/3

L 38239-66 EWT(m)
ACC NR: AP6028696 SOURCE CODE: UR/0219/66/061/002/0050/0053

AUTHOR: Fedotov, V. P.; Rynkova, N. N. (Moscow) 21 B

ORG: none

TITLE: Inactivation of 17-hydroxycorticosteroids in the liver of healthy and irradiated dogs 19

SOURCE: Byulleten' eksperimental'noy biologii i meditsiny, v. 61, no. 2, 1966, 50-53

TOPIC TAGS: corticosteroid, liver, dog, radiation biologic effect, enzyme, adrenal gland, hormone

ABSTRACT: Angiostomized dogs were fed 0.1 g of cortisone with a small amount of meat. Blood was drawn 1 and 2 hours later from the portal and hepatic veins. The intensity of cortisone inactivation by the liver was determined from the difference in the amounts of the hormone present in the two veins. The liver was found to convert or bind 53.5-89.5% (67.6%) of the hormone reaching it with portal blood. Exposure of the animals to lethal doses of gamma rays reduced the rate of steroid retention by 18-50%. The decreased steroid retention may be due to the fact that irradiation also inhibits the liver's enzyme systems. Another possible explanation is that irradiation increases the need for adrenal hormones. Hence, the release of more hormones by the liver may be a regulatory act aimed at compensating impaired functions. This article was presented by Active member AMN SSSR P. D. Gorizontov. Orig. art. has: 1 figure and 1 table. [JPRS]

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Card 1/1

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AUTHORS: Rogozkin, V. D. (Moscow); Fedotov, V. P. (Moscow); Chertkov, K. S. (Moscow)

ORG: none

TITLE: The effect of small doses of glucocorticoids on severe radiation sickness

SOURCE: Meditsinskaya radiologiya, v. 12, no. 1, 1967, 89-91

TOPIC TAGS: radiation sickness, drug treatment, corticoid, corticosteroid, gamma irradiation, radiation cell effect, antiradiation drug

ABSTRACT: Tests were conducted to determine the effect of small doses of glucocorticoids in cases of severe radiation sickness.. Female guinea pigs weighing 270—350 g were exposed to 300 r of γ-radiation at 3.5 r/sec from an EGO-2 cobalt apparatus. Test animals were given 25 mcg of prednizolon and 2.5 mcg of deksametazon orally once daily for 10 days beginning with the 4th day after irradiation. Examination of treated animals indicated a lower death rate compared with the control group (10% vs 20%), insignificant changes in the amount of 11-oxycorticosteroids in the blood (calculated according to a modified Popens method), a positive effect on hemopoiesis, and the presence of more leukocytes than in control animals. These tests support previous data on the appearance of hypercorticoidism during the period of greatest depression of hemopoiesis and indicate that small doses of glucocorticoids reduce the catabolic and lymphopenic effect which causes postradiation hypercorticoidism. Orig. art. has: 1 graph and 1 table. [04]

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Card 1/1

B.A. FEDOTOV, V.P

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Effect of flexor and extensor reflexes on knee jerk. V. P. Fedotov. *J. Physiol., USSR*, 1951, **37**, 290–297. The knee jerk was recorded in the decerebrated cat in response to rhythmic stimulation at 60–300/min. and the anterior tibial nerve on the same or opposite side stimulated at the same time. The effects on the knee jerk are complex and depend partly on the state of tonus at the time of afferent stimulation. They are discussed in relation to Pavlov's views on inhibition in the central nervous system.

D. H. SMYTH

FEDOTOV, V. P. (Moskva)

Phasic reaction of the liver to the intravenous injection of insulin. Probl. endok. i gorm. 8 no.3:36-39 My-Je '62. (MIRA 15:6)

1. Rukovoditel' - zasluzhennyy deyatel' nauki prof. I. A. Pigalev)

(INSULIN) (LIVER)

KOVAL'SKIY, B.S. (Khar'kov); FEDOTOV, V.P. (Khar'kov)

Design of safety membranes. Prikl. mekh. 1 no.4:113-119 '65.
(MIRA 18:6)

1. Ukrainskiy nauchno-issledovatel'skiy institut khimicheskogo mashinostroyeniya.

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